

CLAIMS

What is claimed:

1 1. An absorbent article having a longitudinal axis, a lateral axis, a longitudinal
2 length, a lateral width, longitudinal end edges and lateral side edges, a front waist region, a
3 rear waist region, an intermediate crotch region interconnecting the front and rear waist
4 regions, and a pair of leg openings on the lateral sides of the crotch region, the article
5 further comprising:

6 a liquid-pervious backsheet;

7 a liquid-pervious topsheet;

8 a pair of liquid-pervious barrier cuffs bonded to the topsheet;

9 an absorbent core disposed between the topsheet and the backsheet;

10 a liquid-impervious barrier layer disposed between the absorbent core and
11 the backsheet; and

12 leg elastic members located in at least a portion of the crotch region adjacent
13 to the leg openings;

14 wherein the barrier layer is not present in the portion of the article where the leg elastic
15 members are located, and the barrier layer does not wrap around the core.

1 2. The disposable absorbent article of claim 1, wherein the topsheet is not
2 present in the portion of the article where the leg elastic members are located.

1 3. The disposable absorbent article of claim 1, wherein the barrier cuffs and the
2 backsheet are formed of a hydrophobic material.

1 4. The disposable absorbent article of claim 1, wherein the absorbent core has
2 lateral edges which are located laterally inboard of the leg elastics.

1 5. The disposable absorbent article of claim 4, further comprising a bonding
2 point where the barrier cuffs are bonded to the topsheet, wherein the lateral edges of the
3 absorbent core are located laterally inboard of the bonding points.

1 6. The disposable absorbent article of claim 4, wherein the absorbent core has a
2 longitudinal length which is less than the longitudinal length of the absorbent article, and
3 has longitudinal edges which do not extend to the absorbent article's longitudinal end
4 edges.

1 7. The disposable absorbent article of claim 1, wherein the barrier layer has
2 lateral edges which are located laterally inboard of the leg elastics.

1 8. The disposable absorbent article of claim 7, wherein the barrier layer has a
2 longitudinal length that extends to the absorbent article's longitudinal end edges.

1 9. The disposable absorbent article of claim 1, wherein the topsheet has lateral
2 edges which are located laterally inboard of the leg elastics.

1 10. The disposable absorbent article of claim 1, wherein the core, the barrier
2 layer, and the topsheet all have lateral edges which are located laterally inboard of the leg
3 elastics.

1 11. The disposable absorbent article of claim 1, wherein the portion of the crotch
2 region, where the leg elastics are located and where the barrier layer does not extend, form
3 breathable regions of reduced stiffness.

1 12. The disposable absorbent article of claim 1, wherein the leg elastics
2 comprise a pair of generally straight elastic members, each generally parallel to the
3 longitudinal axis of the article, the elastic members being laterally separated from each
4 other by a leg elastic separation distance.

1 13. The disposable absorbent article of claim 12, wherein the absorbent core:
2 is generally rectangular;
3 has a lateral width which is less than the leg elastic separation distance; and
4 has lateral edges which are located laterally inboard of the elastic members.

1 14. The disposable absorbent article of claim 13, wherein the absorbent core has
2 a longitudinal length which is less than the longitudinal length of the absorbent article, and
3 has longitudinal edges which do not extend to the absorbent article's longitudinal end
4 edges.

1 15. The disposable absorbent article of claim 12, wherein the barrier layer:
2 is generally rectangular;
3 has a lateral width which is less than the leg elastic separation distance; and
4 has lateral edges which are located laterally inboard of the elastic members.

1 16. The disposable absorbent article of claim 15, wherein the barrier layer has a
2 longitudinal length that extends to the absorbent article's longitudinal end edges.

1 17. An absorbent article having a longitudinal axis, a lateral axis, a longitudinal
2 length, a lateral width, longitudinal end edges and lateral side edges, a front waist region, a
3 rear waist region, and an intermediate crotch region interconnecting the front and rear waist
4 regions, the article further comprising:

5 a liquid-pervious hydrophobic backsheet;

6 a liquid-pervious hydrophilic topsheet;

7 a pair of liquid-pervious hydrophobic barrier cuffs bonded to the topsheet;

8 an absorbent core disposed between the topsheet and the backsheet;

9 a liquid-impervious barrier layer disposed between the absorbent core and
10 the backsheet; and

11 leg elastic members located in at least a portion of the crotch region adjacent
12 to the leg openings;

13 wherein the barrier layer is not present in the portion of the article where the leg elastic
14 members are located.

1 18. The disposable absorbent article of claim 17, wherein the topsheet is not
2 present in the portion of the article where the leg elastic members are located.

1 19. The disposable absorbent article of claim 17, wherein the absorbent core has
2 lateral edges which are located laterally inboard of the leg elastics.

1 20. The disposable absorbent article of claim 19, further comprising a bonding
2 point where the barrier cuffs are bonded to the topsheet, wherein the lateral edges of the
3 absorbent core are located laterally inboard of the bonding points.

1 21. The disposable absorbent article of claim 19, wherein the absorbent core has
2 a longitudinal length which is less than the longitudinal length of the absorbent article, and
3 has longitudinal edges which do not extend to the absorbent article's longitudinal end
4 edges.

1 22. The disposable absorbent article of claim 17, wherein the barrier layer has
2 lateral edges which are located laterally inboard of the leg elastics.

1 23. The disposable absorbent article of claim 22, wherein the barrier layer has a
2 longitudinal length that extends to the absorbent article's longitudinal end edges.

1 24. The disposable absorbent article of claim 17, wherein the topsheet has lateral
2 edges which are located laterally inboard of the leg elastics.

1 25. The disposable absorbent article of claim 17, wherein the core, the barrier
2 layer, and the topsheet all have lateral edges which are located laterally inboard of the leg
3 elastics.

1 26. The disposable absorbent article of claim 17, wherein the portion of the
2 crotch region, where the leg elastics are located and where the barrier layer does not extend,
3 form breathable regions of reduced stiffness.

1 27. The disposable absorbent article of claim 17, wherein the leg elastics
2 comprise a pair of generally straight elastic members, each generally parallel to the
3 longitudinal axis of the article, the elastic members being laterally separated from each
4 other by a leg elastic separation distance.

1 28. The disposable absorbent article of claim 27, wherein the absorbent core:
2 is generally rectangular;
3 has a lateral width which is less than the leg elastic separation distance; and
4 has lateral edges which are located laterally inboard of the elastic members.

1 29. The disposable absorbent article of claim 28, wherein the absorbent core has
2 a longitudinal length which is less than the longitudinal length of the absorbent article, and
3 has longitudinal edges which do not extend to the absorbent article's longitudinal end
4 edges.

1 30. The disposable absorbent article of claim 27, wherein the barrier layer:
2 is generally rectangular;
3 has a lateral width which is less than the leg elastic separation distance; and
4 has lateral edges which are located laterally inboard of the elastic members.

1 31. The disposable absorbent article of claim 30, wherein the barrier layer has a
2 longitudinal length that extends to the absorbent article's longitudinal end edges.

1 32. An absorbent article having a longitudinal axis, a lateral axis, a longitudinal
2 length, a lateral width, longitudinal end edges and lateral side edges, a front waist region, a
3 rear waist region, and an intermediate crotch region interconnecting the front and rear waist
4 regions, the article further comprising:

5 a liquid-pervious hydrophobic backsheet;
6 a liquid-pervious hydrophilic topsheet;
7 a pair of liquid-pervious hydrophobic barrier cuffs bonded to the topsheet;
8 an absorbent core disposed between the topsheet and the backsheet;
9 a liquid-impervious barrier layer disposed between the absorbent core and
10 the backsheet, the barrier layer having longitudinal edges and lateral edges; and
11 breathable zones of reduced stiffness located in the portions of the article
12 beyond the edges of the barrier layer.

1 33. The disposable article of claim 32, wherein the breathable zones of reduced
2 stiffness comprise portions of the absorbent article which do not encompass any liquid-
3 impervious material.

1 34. The disposable article of claim 32, wherein the breathable zones of reduced
2 stiffness comprise portions of the absorbent article which do not encompass any hydrophilic
3 material.

1 35. The disposable article of claim 32, wherein the breathable zones of reduced
2 stiffness comprise portions of the absorbent article which do not encompass any liquid-
3 impervious or hydrophilic material.

1 36. The disposable absorbent article of claim 32, further comprising leg elastic
2 members located in at least a portion of the crotch region.

1 37. The disposable absorbent article of claim 36, wherein the absorbent core has
2 lateral edges which are located laterally inboard of the leg elastics.

1 38. The disposable absorbent article of claim 37, further comprising a bonding
2 point where the barrier cuffs are bonded to the topsheet, wherein the lateral edges of the
3 absorbent core are located laterally inboard of the bonding points.

1 39. The disposable absorbent article of claim 37, wherein the absorbent core has
2 a longitudinal length which is less than the longitudinal length of the absorbent article, and
3 has longitudinal edges which do not extend to the absorbent article's longitudinal end
4 edges.

1 40. The disposable absorbent article of claim 36, wherein the barrier layer has
2 lateral edges which are located laterally inboard of the leg elastics.

1 41. The disposable absorbent article of claim 40, wherein the barrier layer has a
2 longitudinal length that extends to the absorbent article's longitudinal end edges.

1 42. The disposable absorbent article of claim 36, wherein the topsheet has lateral
2 edges which are located laterally inboard of the leg elastics.

1 43. The disposable absorbent article of claim 36, wherein the core, the barrier
2 layer, and the topsheet all have lateral edges which are located laterally inboard of the leg
3 elastics.

1 44. The disposable absorbent article of claim 36, wherein the leg elastics
2 comprise a pair of generally straight elastic members, each generally parallel to the
3 longitudinal axis of the article, the elastic members being laterally separated from each
4 other by a leg elastic separation distance.

1 45. The disposable absorbent article of claim 44, wherein the absorbent core:
2 is generally rectangular;
3 has a lateral width which is less than the leg elastic separation distance; and
4 has lateral edges which are located laterally inboard of the elastic members.

1 46. The disposable absorbent article of claim 45, wherein the absorbent core has
2 a longitudinal length which is less than the longitudinal length of the absorbent article, and
3 has longitudinal edges which do not extend to the absorbent article's longitudinal end
4 edges.

1 47. The disposable absorbent article of claim 44, wherein the barrier layer:
2 is generally rectangular;
3 has a lateral width which is less than the leg elastic separation distance; and
4 has lateral edges which are located laterally inboard of the elastic members.

1 48. The disposable absorbent article of claim 47, wherein the barrier layer has a
2 longitudinal length that extends to the absorbent article's longitudinal end edges.